



*Tencent*



# *TMDC Northbound Interface*

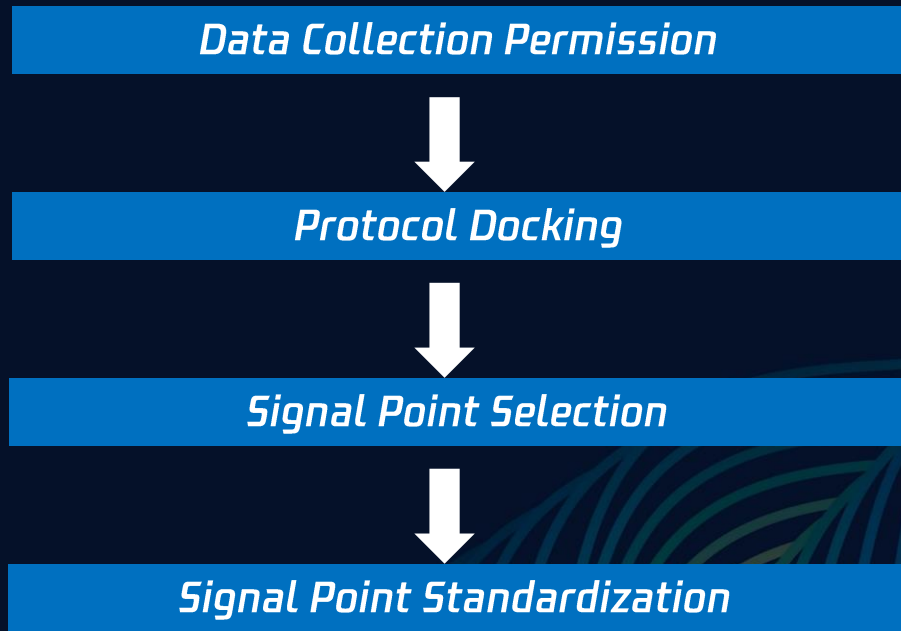
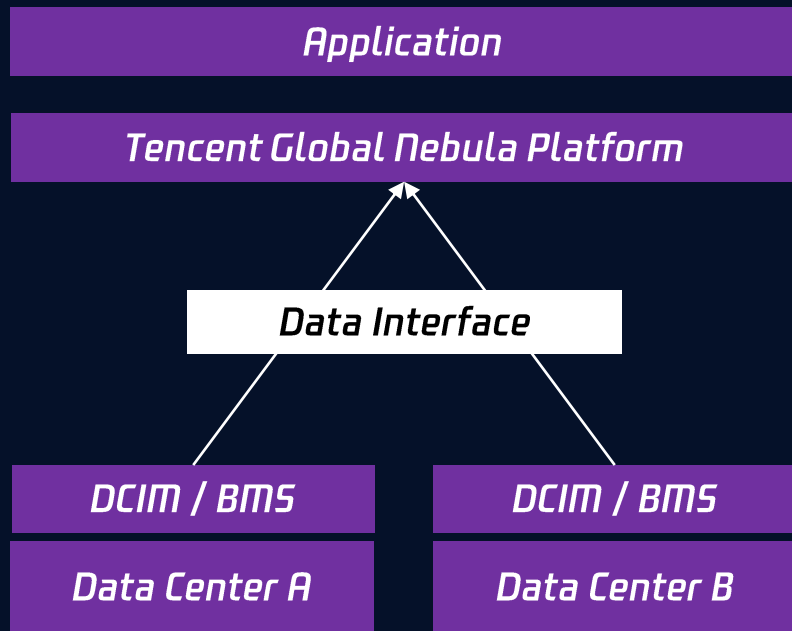
*Terry Yan*

*2019.01.15*

# Global Location of Tencent Cloud

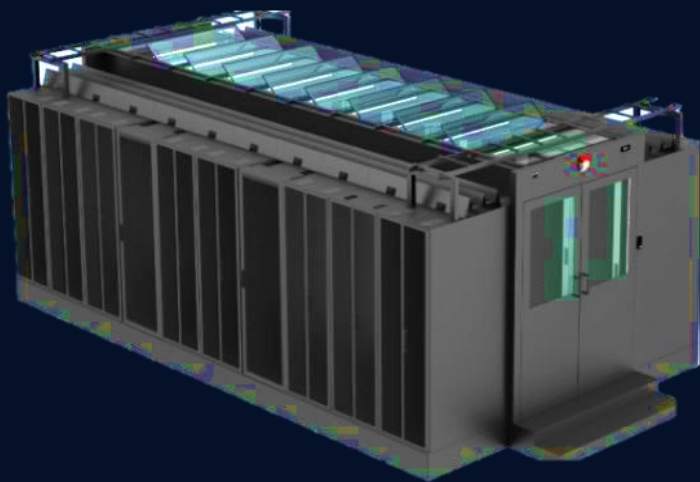


# >>> *The Obstacles of Data Collection*



# »» *What is TMDC Northbound Interface*

*A protocol used for monitoring and controlling facilities in TMDC*



- 1. Taking each TMDC as granularity;*
- 2. Based on SNMP Protocol;*
- 3. Define the facilities in TMDC need to monitor and control;*
- 4. Define the data points of each facility*
- 5. Assign GUID for each data point;*

*Tencent Nebula Platform has accessed to more than 1700 TMDC, covered greater than half million servers based on TMDC Northbound Interface*

# >>> An Example of Facilities

*Facility type*

*Signal Points*

*GUID*

*Accuracy*

*Meaning*

Temperature & Humidity	envIndex	4.7.1.1.1	r	0	Index
	envRackLabel	4.7.1.1.2	r	0	string Label
	envCoolUpTemp	4.7.1.1.3	r	1	Cold aisle Temp UP ( ° C )
	envCoolUpHum	4.7.1.1.4	r	1	Cold aisle Hum UP ( % ) )
	envCoolMidTemp	4.7.1.1.5	r	1	Cold aisle Temp Mid ( ° C )
	envCoolMidHum	4.7.1.1.6	r	1	Cold aisle Hum Mid ( % ) )
	envCoolDownTemp	4.7.1.1.7	r	1	Cold aisle Temp Bottom ( ° C )
	envCoolDownHum	4.7.1.1.8	r	1	Cold aisle Hum Buttom ( % ) )
	envHotUpTemp	4.7.1.1.9	r	1	Hot aisle Temp UP ( ° C )
	envHotUpHum	4.7.1.1.10	r	1	Hot aisle Hum UP ( % ) )
	envHotMidTemp	4.7.1.1.11	r	1	Hot aisle Temp Mid ( ° C )
	envHotMidHum	4.7.1.1.12	r	1	Hot aisle Hum Mid ( % ) )
	envHotDownTemp	4.7.1.1.13	r	1	Hot aisle Temp Bottom ( ° C )
	envHotDownHum	4.7.1.1.14	r	1	Hot aisle Hum Buttom ( % ) )

# »» *Benefits of Northbound Interface*

*Making the data collection easier , reducing workload and time expenditure greatly*

1. *Downloading tools and guidance from Nebula website*



2. *Suppliers taking Self testing*



3. *Using standardized tools to check the interface*

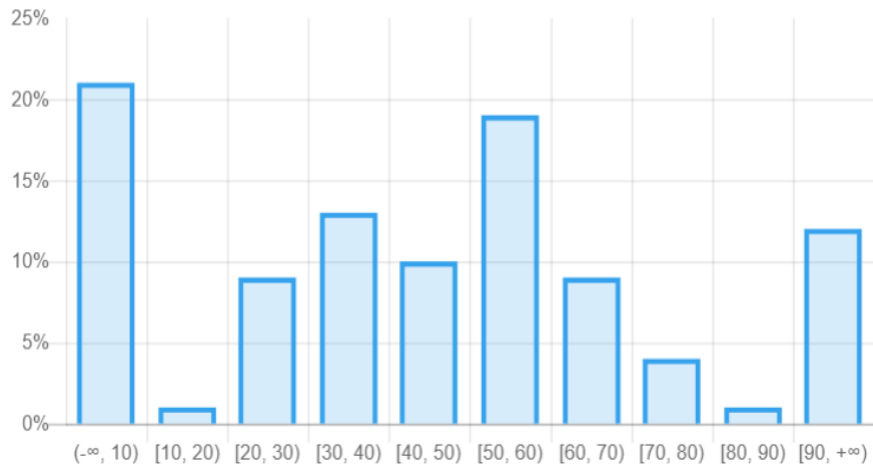


4. *Application deployed via replicating*

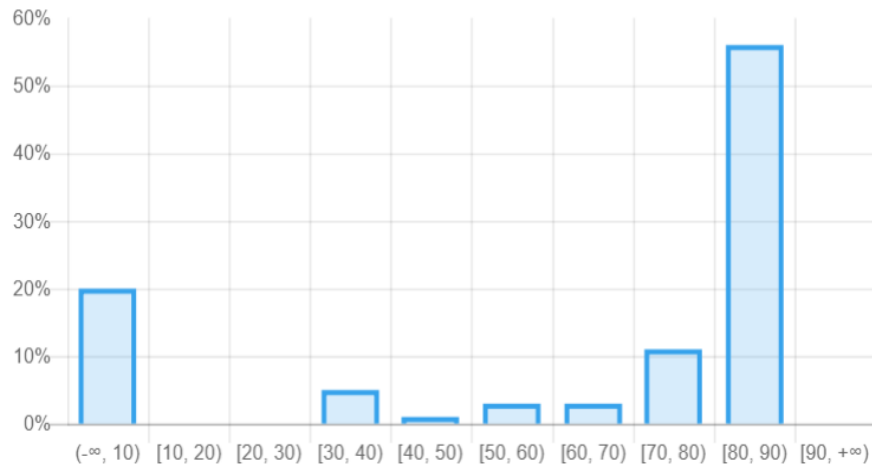
# Modularization of Software Deployment

## CRAC Monitoring

全量 MDC 空调水阀开度统计



全量 MDC 空调风机转速统计





*THANKS*

